

Young Researchers Workshop

ICOP 2016

Breakout Session: Scientific methods I: Acquiring remote sensing data for your project

*Saturday, 18 June 2016, 14:00 – 15:45 (slot 1), 16:15 – 18:00 (slot 2). The slots are identical; **please do not sign up for both slots!***



Presenter:
Frank Günther

Content and aim:

Remote sensing and GIS methods are powerful and exciting tools studying polar regions, which are usually remote and difficult to access. A variety of space and air-borne remote sensing platforms offer a large range of sensors with different characteristics of spatial, spectral, radiometric, and temporal resolution. Depending on the needs for your application or project, this session will give an overview on satellite missions and demonstrate examples for prospecting and procuring optical remote sensing imagery for change detection.

Background:

Dr. Günther is a geographer working as a postdoc within the PETA-CARB group at AWI Potsdam, which deals with investigating permafrost thaw in the Arctic and its impacts on the soil organic carbon pool. For him, the most impressive characteristic of permafrost is the widespread occurrence of ice in the ground, which renders permafrost landscapes vulnerable to thaw and subsequent destabilization. Observations of these thermokarst processes are the key element of his research that employs quantitative and qualitative methods of remote sensing and spatial data analyses.

Learning goals:

- Where to search and how to find and get satellite images
- How to write data proposals
- How to perform change detection

Requirements:

Please **bring a laptop** and create an user account on <http://earthexplorer.usgs.gov/>